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**RESPONSE UNDER 37 C.F.R. § 1.116
EXPEDITED PROCEDURE REQUESTED
EXAMINING GROUP 2137
PATENT**

Customer No. 22,852
Attorney Docket No. 04329-2151

AF
2132

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
Hideo SHIMIZU et al.) Group Art Unit: 2137
Application No.: 09/379,791) Examiner: Matthew Smithers
Filed: August 24, 1999)
For: DATA PROCESSOR,) **Mail Stop AF**
COMMUNICATION SYSTEM AND)
RECORDING MEDIUM)

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MAY 28 2004

Technology Center 2100

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

REQUEST FOR RECONSIDERATION

In reply to the Final Office Action mailed February 27, 2004, and pursuant to 37 C.F.R. § 1.116, Applicants respectfully request reconsideration of the newly-raised grounds of rejection set forth in the Final Office Action.

In the Final Office Action, the Examiner introduced a new reference, U.S. Patent No. 5,261,003 to Matsui et al., to reject all of pending claims 1-14. In particular, the Examiner rejected claims 1-14 under 35 U.S.C. § 102(b) as anticipated by Matsui et al. As allowed for in M.P.E.P. § 706.07(c), Applicants request that the Examiner consider the following remarks and withdraw the final rejections of claims 1-14.

To anticipate a claim, the reference must teach every element of the claim.

M.P.E.P. § 2131.01 (8th ed. 2001, revised February 2003). Because Matsui et al. fails to disclose several elements recited in claims 1-14, Applicants request the reconsideration and withdrawal of the section 102 rejection of these claims.

For example, claim 1 recites a key converting section which conducts key conversions to output extended keys based on one of an encryption key and a decryption key. Nothing in the reference teaches outputting extended keys based on other keys. Instead, Matsui et al. discloses a data scrambling system that receives input plaintext data and produces scrambled text using an extended key or cipher key. (Matsui et al., col. 5, ll. 46-61.) The content of the cipher key and the selection of the extended key are based on the input plaintext. (Id., col. 6, ll. 8-11; col. 9, ll. 63-66.) According to the reference, varying the keys based on the input text achieves a high random rate to reduce the possibility of code breaking. (Id., col. 9, l. 66 - col. 10, l. 8.)

The reference fails to teach a key converting section which conducts key conversions to output extended keys based on one of an encryption key and a decryption key, instead teaching a scrambling processing block that scrambles text using keys "depending on the data to be scrambled such as the plaintext." (col. 7, ll. 51-55.) Because Matsui et al. fails to disclose every element of claim 1, Applicants respectfully request the withdrawal of the section 102 rejection of claim 1 and the claims that depend therefrom, i.e., claims 2-7.

Claim 8 recites a program recorded on a computer readable medium, the program comprising a key converting section which conducts key conversions to output

extended keys based on one of an encryption key and a decryption key. Nothing in the reference teaches outputting extended keys based on other keys. Instead, Matsui et al. teaches a scrambling processing block that scrambles text using keys “depending on the data to be scrambled such as the plaintext.” (col. 7, ll. 51-55.) Therefore, the reference fails to teach a computer program including a key converting section which conducts key conversions to output extended keys based on one of an encryption key and a decryption key. Because Matsui et al. fails to disclose every element of claim 8, Applicants respectfully request the withdrawal of the section 102 rejection of claim 8 and the claims that depend therefrom, i.e., claims 9-13.

Claim 14 recites a key transformation section for outputting a second key and a third key by using an involution function based on inputted first key and for outputting the first key and a fourth key by using the involution function based on inputted second key. Matsui et al. does not contain such a teaching. Instead, the Examiner refers to Figure 1 in the reference showing an address calculating circuit that recursively “calculates and [sic] address of a [sic] extended key to be selected on the basis of the input plaintext and outputs the calculated address.” (Matsui et al., col. 6, ll. 8-12.) A key stored at the calculated address is retrieved and used to scramble the input plaintext data. The scrambled text becomes the input for the next iteration of address calculation and key retrieval. (Id., col. 6, ll. 26-44.)

The address calculation function of the reference is not the same as a key transformation section for outputting a second key and a third key by using an involution function based on inputted first key and for outputting the first key and a fourth key by

using the involution function based on inputted second key. First, the reference discloses outputting *an address of a key*, not a key itself, as recited in claim 14. Furthermore, the reference teaches outputting addresses calculated *on the basis of the input plaintext*, not keys transformed based on inputted keys, as recited in claim 14. Still further, the address calculation in Matsui determines an address of a key, which is not the same as key transformation recited in claim 14. For at least these reasons, Matsui et al. does not disclose every element of claim 14, and Applicants respectfully request the reconsideration and withdrawal of the section 102 rejection of claim 14.

Applicants respectfully request that this Request for Reconsideration be entered by the Examiner and that the Examiner find that claims 1-14 are in condition for allowance. Furthermore, Applicants respectfully point out that the final action by the Examiner presented new grounds of rejection based on newly-cited art. It is respectfully submitted that entering this Request for Reconsideration would allow the Applicants to reply to the final rejections and place the application in condition for allowance.

In view of the foregoing remarks, Applicants submit that their claimed invention is neither anticipated by nor rendered obvious in view of the prior art references cited against this application. Applicants therefore request the entry of this Request for Reconsideration, the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims.

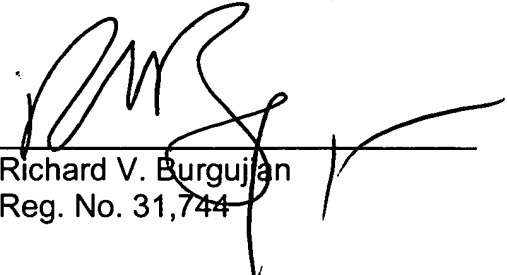
Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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GARRETT & DUNNER, L.L.P.

Dated: May 25, 2004

By: _____


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